Mr. John Flesher The Ford Meter Box Company, Inc. P.O. Box 398 775 Manchester Avenue Wabash, IN 46992-0443

Re: 169-13843-00003

Third Administrative Amendment to

FESOP 169-5469-00003

Dear Mr. Flesher:

The Ford Meter Box Company, Inc. was issued a Federally Enforceable State Operating Permit (FESOP) on December 13, 1996 for a brass captive foundry. A letter requesting the addition of a core molding machine was received by IDEM, OAQ on January 29, 2001. Based on the information provided by The Ford Meter Box Company, Inc., the potential volatile organic compounds (VOC), nitrogen oxides (NOx), carbon monoxide (CO) and particulate matters (PM-10) emissions from the proposed unit are determined to be 0.33, 0.20, 0.10 and 0.00 tons per year, respectively. The reason that the proposed molding machine has negligible PM-10 emissions is the raw material used by the molding machine for mold making is a thick sticky mixture of sand and liquid resin and behaves like a molasses. The emissions from the proposed unit are below the exemption levels specified in 326 IAC 2-1-1. Therefore, pursuant to 326 IAC 2-7-1(21)(A), the proposed core molding machine can be considered an insignificant activity. Limited potential to emit for any regulated pollutants at this source, after the addition of the proposed emission unit, is remained at less than 100 tons per year. Pursuant to the provisions of 326 IAC 2-8-10 the permit is hereby administratively amended as follows:

The proposed core molding machine is being added to Section A.3 (Insignificant Activities) as follows:

- (hh) one (1) 19,810 gallon No.2 fuel oil underground storage tank; and
- (ii) one (1) parts washer with no VOC emissions exhausting through stack/vent "BD"-; and
- (jj) one (1) natural gas fired core molding machine, with a maximum heating capacity of 0.3712 MMBtu/hr and a maximum shell sand throughput of 660 pounds per hour.

The following construction conditions are applicable to the proposed project:

- 1. General Construction Conditions
 - The data and information supplied with the application shall be considered part of this source modification approval. Prior to <u>any</u> proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
- 2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Ford Meter Box Company, Inc. Wabash, Indiana Permit Reviewer: SCP/EVP

- 3. <u>Effective Date of the Permit</u> Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
- 4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
- All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Pan at (973) 575-2555 x3248, or call (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments SCP/EVP

cc: File - Wabash County U.S. EPA, Region V

Wabash County Health Department

Air Compliance Section Inspector Ryan Hillman Compliance Data Section - Karen Nowak Administrative and Development - Janet Mobley Technical Support and Modeling - Michelle Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

The Ford Meter Box Company, Inc. 775 Manchester Avenue Wabash, Indiana 46992

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F169-5469-00003	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 13, 1996

First Administrative Amendment No.: 169-10615 Issuance Date: March 8, 1999 Second Administrative Amendment No.: 169-11779 Issuance Date: February 10, 2000

Third Administrative Amendment No.: 169-13843	Page affected: 6
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality Original by Paul Dubenetzky	Issuance Date: April 6, 2001

- (i) storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (j) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (k) refractory storage not requiring air pollution control equipment;
- (I) application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
- (m) machining where an aqueous cutting coolant continuously floods the machining interface;
- (n) degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
- (o) cleaners and solvents with low vapor pressure and with a combined usage of less than 145 gallons per 12 months;
- (p) brazing equipment, cutting torch, soldering equipment and welding equipment not resulting in HAP emissions;
- (q) close loop heating and cooling systems;
- (r) cutting 200.00 linear feet or less of one inch (1") plate or equivalent;
- (s) using 80 tons or less of welding consumables;
- (t) operations using aqueous solutions with less than 1 percent of VOCs excluding HAPs;
- (u) water based adhesives that are less than or equal to 5 percent VOCs by volume excluding HAPs;
- (v) quenching operations used with heat treating processes;
- replacement or repair of electrostatic precipitators, bags in baghouse and filters in other air filtration equipment;
- (x) heat exchanger cleaning and repair;
- (y) paved and unpaved roads and parking lots with public excess;
- (z) purging of gas lines and vessels not associated with production process;
- equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup;
- (bb) blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (cc) stationary fire pumps;
- (dd) grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual standard cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations;
- (ee) mold release agent using low volatile products;
- (ff) a laboratory as defined in 326 IAC 2-7-1(20)(C);
- (gg) other activities with volatile organic compound (VOC) emissions equal to or less than 15 pounds per day, and activities with particulate matter (PM) emissions equal to or less than 25 pounds per day;
- (hh) one (1) 19,810 gallon No.2 fuel oil underground storage tank;
- (ii) one (1) parts washer with no VOC emissions exhausting through stack/vent "BD"; and
- (jj) one (1) natural gas fired core molding machine, with a maximum heating capacity of 0.3712 MMBtu/hr and a maximum shell sand throughput of 660 pounds per hour.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

Appendix A: Emissions Calculations Page 1 of 3 TSD App A **Process Emissions**

Company Name: Ford Meter Box Company, Inc.

Address City IN Zip: 775 Manchester Avenue

CP: 169-13843 **PIt ID**: 169-00003

Reviewer: Lisa M. Wasiowich/EVP

Date: February 20, 2001

The maximum throughput capacity of sand mixture is 660 lbs/hr.

The sand mixture contains 2% resin and 0.3% catalyst, each of which contains 5% formaldehyde.

According to the manufacturer, 10% of the formaldehyde could be released as gas.

PTE = [(2% + 0.3%) * 660] * 5% concentration * 10% released * 8760 hrs/yr / 2000 lbs/ton

PTE = 0.33244 tons per year formaldehyde

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Company Name: Ford Meter Box Company, Inc.

Address City IN Zip: 775 Manchester Avenue

CP: 169-13843 **PIt ID**: 169-00003

Reviewer: Lisa M. Wasiowich/EVP

Date: February 20, 2001

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

0.4

Pollutant

Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100.0	VOC 5.5	CO 84.0
				**see below		
Potential Emission in tons/yr	0.0	0.0	0.0	0.2	0.0	0.1

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 HAPs Emissions

Company Name: Ford Meter Box Company, Inc.

Address City IN Zip: 775 Manchester Avenue

CP: 169-13843 **PIt ID**: 169-00003

Reviewer: Lisa M. Wasiowich/EVP

Date: February 20, 2001

HAPs - Organics

Emission Factor in lb/MMcf	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.414E-06	1.951E-06	1.219E-04	2.927E-03	5.528E-06

HAPs - Metals

Emission Factor in lb/MMcf	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	8.129E-07	1.788E-06	2.276E-06	6.178E-07	3.414E-06

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.